

Want Reliable Sprinklers?

Maintain Them

By GMC(SW) Bill Fisher,
Naval Safety Center

At 0608, a flooding alarm went off in a ship's magazine. A duty petty officer from the weapons department secured firemain pressure to the sprinkler system and hurried to the flooded space. He found 4 inches of water on the deck. Using buckets, swabs and a submersible pump, Sailors dewatered the magazine. What caused the flooding? A ruptured diaphragm had let water leak through a valve.

That incident was minor, but another ship wasn't as lucky. When duty personnel responded to a flooding alarm, they found 20 inches of water in a loader room and 2 feet in the magazine below. Electrical and electronic-equipment damage was minor, but mechanical parts (e.g., nuts, bolts and connections) required extensive cleanup to prevent corrosion.

I'm not surprised that we receive reports like these. During surveys, I see some magazine-sprinkler systems that are ready to fall off the bulkhead, which tells me that some people don't understand the importance of the systems. We all hope we'll never need the sprinklers for an emergency, but we can't afford to gamble and let them fall into a state of disrepair.

All sprinkler PMS and housekeeping duties are important, and three maintenance actions are vital to keeping them in top condition:

- Inspect the control-system piping and parts every two weeks¹.

- Test, clean, inspect, and lubricate the sea-water sprinkler system every two months².

- Flush the supply piping for sea-water sprinklers³.

When doing the biweekly inspection of control-system piping and parts, be especially alert for any leaks. If you find any, report them to the damage-control assistant and the weapons officer. The check sheet for the magazine-sprinkler system, found in the sprinkler handbook⁴, backs up this requirement. The check sheet also lists parts to be inspected, including all the control piping and the sprinkler-control valve.

Take care of your magazine sprinklers, or be prepared to pay perhaps millions to repair and replace ordnance. You'll also have the aggravation of submitting a lot of unnecessary paperwork. ☹

The author's e-mail address is wfisher@safetycenter.navy.mil.

Are your sprinkler systems in this condition? If so, you're headed for trouble.



For More Info...



¹ MIP 5221/009-79, MRC 2W-1R requires bi-weekly inspection, as well as inspection after the control-system piping and components are used.

² MRC 2M-1 requires sea-water sprinkler systems to be tested, cleaned, inspected and lubricated bimonthly.

³ MRC R-5Q requires flushing of the supply piping for sea-water sprinklers quarterly when at sea.

⁴ The Sprinkler Handbook's publication number is S9522-AA-HBK-010.